ATTORNEYS AT LAW

April 1, 2021

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OF COUNSEL: RAYMOND SAYED

Christian Klein, Chairperson Arlington Zoning Board of Appeals 51 Grove Street Arlington, MA 02476

Re:

1165R Massachusetts Avenue, Arlington, MA – Response to Wetlands/Resource Area Regulatory Peer Review

Dear Chairperson Klein:

1165R Mass MA Property, LLC, the applicant for the Comprehensive Permit for the property at 1165R Massachusetts Avenue, Arlington, Massachusetts submits the following response to the comments and recommendations provided by BETA Group, Inc. in its letter dated March 11, 2021 (hereinafter referred to as the "Applicant", the "Property" and "BETA", respectively). For ease of reference, this response tracks the comments and recommendations in BETA's March 11, 2021 letter to the Arlington Zoning Board of Appeals (hereinafter referred to as the "Board"). The information contained in this response was provided by Goddard Consulting, Kyle Zick Landscape Architecture, Inc. and Bohler Engineering. The attachments referenced in this letter are contained in a separate appendix included with this letter.

INTRODUCTION

There are two separate riverfront areas within the Project site. Area 1 is along Ryder Street and Area 2 is in the vicinity of Ryder Brook. See the attached plan showing the riverfront conditions. See Exhibit 1 in the Appendix.

In Area 1, there is presently 2,240 square feet of impervious surface that consists of Ryder Street, the driveway and walkway, and 1,212 square feet of pervious (but "disturbed") area, consisting of mulch and ornamental plantings.

The existing pavement of Ryder Street in Area 1 will be replaced in its exact footprint. There will be no other changes in Area 1. The amount of pervious and impervious surfaces will remain unchanged.

In Area 2, the area consists of paved parking lot, an existing drainage ditch known as Ryder Brook and a vegetated buffer adjacent to the Brook. The impervious area is 18,699 square feet and the pervious area, which includes the Brook and vegetated buffer, is 2,204 square feet.

The pervious portion of Area 2 will be relocated, enlarged and significantly improved with a variety of native plantings. The daylighted portion of Ryder Brook will be increased from

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120 feet to 200 feet, with the amount of bank resource area increased from 249 linear feet to 363 linear feet. The amount of stream bed (equivalent to Land Under Waterways recourse area, "LUW") will be increased from 816 square feet to 1,880 square feet. The vegetated buffer adjacent to Ryder Brook will be increased from 1,388 square feet to 2,975 square feet, and importantly, the vegetation will be changed from nearly all non-native invasive species to 100% native species. The total impervious surface in Area 2 will be reduced from 18,699 square feet to 13,438 square feet, a reduction of 5,261 square feet.

In addition to the substantial reduction in impervious area (by 5,261 square feet) and greatly expanded and improved Ryder Brook, the project will also provide native plantings immediately adjacent to the Mill Brook. Although technically not within riverfront area due to the Historic Mill Complex exemption, these plantings and associated reduction in impervious area are essentially adding to the mitigation provided under the riverfront redevelopment performance standards outlined in 310 CMR 10.58(5)(f) and (g).

The "Planting Plan" and detailed "Swale Planting Plan" (Exhibits 2 and 3) contain the details regarding the species to be planted along Mill Brook and the relocated Ryder Brook. The species selected for along Mill Brook will provide shading, plus foraging and sheltering habitat for local wildlife. In the selection of the plant species, consideration was given to the likely quantity of available light and the proximity to the existing Mill Brook retaining walls.

BETA Recommendation: The Applicant should provide the ZBA with an evaluation of the Project's compliance with the Riverfront Area performance standards for the portions of the Site that do not qualify as Degraded RA that addresses the restoration requirements for impacts to non-degraded Riverfront Area under 310 CMR 10.58(5)(f & g). BETA suggests increasing native vegetation density near Mill Brook to provide shading and wildlife habitat. The planting locations and species selected for this area should consider the light available for growth of the species and the proximity of the root zone to the Mill Brook retaining walls, to protect the stability of the retaining walls.

Redevelopment in Riverfront Area Performance Standards

The following is a detailed analysis of compliance with the redevelopment standards of 310 CMR 10.58(5). The project proposes development and habitat restoration within previously degraded riverfront area. Therefore, it is subject to the following redevelopment standard:

(5) Redevelopment Within Previously Developed Riverfront Areas; Restoration and Mitigation. Notwithstanding the provisions of 310 CRM 10.58(4)(c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation of expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed riverfront area contains areas

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degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Work to redevelop previously developed riverfront areas shall conform to the following criteria:

(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c.131 §40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.

The Applicant states that the project will result in a substantial improvement to existing conditions in the riverfront. The amount of degraded (impervious) land will be reduced by 5,261 square feet and an existing open drainage ditch will be relocated, lengthened and planted with a variety of native species. The stormwater management system will be a great improvement over existing conditions.

(b) Stormwater management is provided according to standards established by the Department.

Stormwater management will comply with MassDEP stormwater standards.

(c) Within 200 foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).

Here, the riverfront area is mostly a paved parking lot. Technically, a portion of the proposed work (filling of the existing drainage ditch) is closer to the river than the proposed relocated drainage ditch. However, the substantial improvement over existing conditions of the riverfront area compensates for this as allowed in 10.58(f & g).

(d) Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).

As the plans clearly indicate, there is no opportunity to locate the work outside of the riverfront. Due to specific site design requirements, including vehicle flow, parking and pedestrian safety, the project cannot

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be located further from the river than the existing well-defined limit of disturbance.

(e) The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).

The area of proposed work by the Applicant reduces the amount of existing degraded area by 5,261 square feet. The existing degraded area is greater than 10% of the riverfront area.

- (f) When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d) and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Restoration shall include:
 - 1. removal of all debris, but retaining any trees or other mature vegetation;
 - 2. grading to a topography which reduces runoff and increases infiltration;
 - 3. coverage by topsoil at a depth consistent with natural conditions at the site; and
 - 4. seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site.

The drainage ditch is being restored at a greater than 1:1 ratio, lengthened from 120 linear feet to 200 linear feet in length, with a wider stream bed (increasing the LUW resource area from 816 square feet to 1,880 square feet and the Bank resource area from 249 linear feet to 363 linear feet) and with native species planted along its banks and buffer zone. Areas immediately along Mill Brook will be restored from pavement to native plantings.

(g) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be

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allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d) and (e) at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Mitigation may include off-site restoration of riverfront areas, conservation restrictions under M.G.L. c.184, §§31 through 33 to preserve undisturbed riverfront areas that could be otherwise altered under 310 CMR 10.00, the purchase of development rights within the riverfront area, the restoration of bordering vegetated wetland, projects to remedy an existing adverse impact on the interests identified in M.G.L. c. 131, §40 for which the application is not legally responsible, or similar activities undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact.

The project's mitigation is likely to satisfy the requirements of 310 CMR 10.58(5)(f). However, given that square footage of restoration may not be the most relevant measure of equivalency of environmental protection, the mitigation would satisfy the requirements of this section of the riverfront regulations.

<u>BETA Recommendation</u>: The Applicant should provide preliminary bridge elevation plans that depict the proposed bridge structure in relation to the floodplain elevation to confirm the Project will not result in fill of the 100-year floodplain.

Applicant's Response

The proposed bridge will be built on the existing channel walls and will be above the FEMA 100-year floodplain elevation. Accordingly, there will be no impact to nor filing of the 100-year floodplain. See the preliminary bridge elevation plan, Exhibit 4 in the Appendix.

BETA Comment: The Mill Brook channel has a mapped FEMA Floodway. The Project proposes construction of a bridge over the designated Floodway. If work associated with the bridge construction requires placement of any structures or hanging utilities below the Floodway elevation, consultation with FEMA will be required to confirm a No-Rise Condition.

Applicant's Response

The proposed bridge design does not include any permanent construction below the FEMA floodway elevation.

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BETA Recommendation: Quantify impacts to Bank and Land Under Water and consider providing a naturalized open stream channel for Ryder Brook in its proposed location through the Project Site. Per the Bylaw, this work could be considered "Resource Enhancement", as long as the constructed Banks and adjacent upland (as available) are densely vegetated with native vegetation that provides escape cover, nesting opportunities, food sources to native wildlife, and possibly pollinator habitat. The streambed material should be specified for the purposes of potential habitat for local wildlife, as well as flow velocity. This Resource Enhancement feature may eliminate the need for a Waiver from the Bylaw for this Project design element.

Applicant's Response

The daylighted portion of the Brook will be increased from 120 feet to 200 feet, with the amount of Bank resource area increased from 249 linear feet to 363 linear feet. The amount of stream bed (equivalent to Land Under Waterways resource area, "LUW") will be increased from 816 square feet 1,880 square feet. The vegetated buffer adjacent to the Brook will be increased from 1,388 square feet to 2,975 square feet, and importantly, the vegetation will be changed from nearly all non-native invasive species to 100% native species. The vegetation will provide a variety of wildlife habitat functions, including cover, seed and berry sources, and nectar for pollinators. The riprap substrate and coir fascine logs will provide a variety of cover microhabitats for aquatic insects, small mammals, snakes and amphibians. These improvements clearly constitute a "Resource Enhancement" in accordance with the Wetlands Bylaw.

<u>BETA Recommendation</u>: The Bylaw provides additional levels of protection to areas adjacent to resources that are not provided in the Act. The Applicant has not yet provided sufficient information for the ZBA to make an informed decision to grant Bylaw Waivers.

Applicant's Response

See Exhibit 5 in the Appendix, which shows a comparison of existing conditions within the AURA of Ryder Brook, and a comparable AURA from the proposed relocated, improved brook. The amount of pervious surface within the 0-25' portion of the AURA will be increased from 2,482 square feet to 4,606 square feet, an increase of 2,124 square feet. In the 0-100' AURA, the amount of pervious surface will be increased from 2,650 square feet to 7,660 square feet, an increase of 5,010 square feet. The vegetated buffer adjacent to the brook will go from almost entirely non-native species to 100% native, wildlife-friendly species.

BETA Recommendation: The Bylaw applies the AURA to certain resource areas, including the Bank to intermittent and perennial streams, to ensure protection of the interests identified in Section 1 of the Bylaw (footnote omitted). Based on BETA's Site inspection, the AURA on this Site is generally degraded and has limited function.

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Impacts to AURA that is vegetated should be quantified and any change in impervious area within the AURA should be quantified in accordance with Section 25(F) of the Bylaw Regulations.

Applicant's Response

See the Applicant's response to BETA's recommendation immediately above.

BETA Recommendation: The Applicant should provide the specific criteria for removing vegetation and replacement strategies outlined in Section 24 - Vegetation, B through H of the Bylaw. The proposed plans appear to provide greater area for planting than existing conditions, so the Project may be able to meet, or come close to meeting, the specific Bylaw performance standards.

Applicant's Response

The project environmental consultant, Dan Wells of Goddard Consulting, has reported that 90% of the existing vegetation is non-native. The proposed swale design increases the watercourse length and is planted with 100% native species. See the attached layout and materials plans and site swale plan, Exhibits 3 and 6 in the Appendix.

The planting plan for the replacement vegetation provides for a greater area for plantings than the existing conditions and satisfies the standards set out in Section 24 – Vegetation, Sections B-H of the Bylaw.

<u>BETA Recommendation</u>: Include additional vegetation replacement with consideration to shading of Mill Brook and improvement to native wildlife habitat.

Applicant's Response

The tree removal at the top of Mill Brook originally proposed will not be proceeding. The surveyors have determined that those trees, which sit in close proximity to the Property line, actually are on the abutter's property. The Applicant does not have the lawful authority to remove these trees.

BETA Recommendation: The Applicant could provide dense native plantings adjacent to the relocated Ryder Brook stream and throughout the Project Site near Mill Brook. Additional plantings in the landscaped areas will mitigate impacts to existing habitat features and enhance the Site's ability to provide wildlife habitat.

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Applicant's Response

The proposed swale for the Property incudes all native plantings with far greater habitat value than the existing non-native vegetation on the Property. Please reference the layout and materials plans and the swale plan, Exhibits 3 and 6 in the Appendix.

The additional information provided herein, which supplements the information previously provided to the Board, Commission and BETA, is detailed and addresses the questions raised by the Commission and BETA. To the extent that you require additional information, please not hesitate to contact me.

In advance, I thank the Board and BETA for its professional comments and efforts on behalf of this Project.

ery truly yours,

Mary Winstanley O'Connor

MWO/ccg Enclosures 6926

cc:

Patrick Hanlon, Vice Chairperson (via email)

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